Page 1 of 27 Permit No. WA0037273



Issuance Date: May 23, 2008
Effective Date: July 1, 2008
Expiration Date: June 30, 2013
Modification Date:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT NO. WA0037273

State of Washington DEPARTMENT OF ECOLOGY Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq.

Seashore Villa Mobile Home Park/Emerald Properties L.L.C. 4805 Cushman Road Northeast Olympia, Washington 98506

Plant Location: 4805 Cushman Road Northeast

Olympia, WA 98506

Receiving Water: Eastern side of Budd Inlet just

South of Gull Harbor

Water Body I.D. No.: 47122A8J9

<u>Discharge Location</u>: Latitude: 47° 05' 58" N

Longitude: 122° 53' 45" W

Plant Type: Membrane Bioreactor Activated Sludge

is authorized to discharge in accordance with the special and general conditions that follow.

Garin Schrieve, P.E. Southwest Regional Manager Water Quality Program Washington State Department of Ecology

TABLE OF CONTENTS

SUM	MARY (OF PERMIT REPORT SUBMITTALS	4
		SPECIAL CONDITIONS	
S1.	DISCI	HARGE LIMITATIONS	5
	A.	Effluent Limitations	
	B.	Mixing Zone Descriptions	
S2.	MON	TORING REQUIREMENTS	6
	A.	Monitoring Schedule	
	B.	Sampling and Analytical Procedures	
	C.	Flow Measurement	
	D.	Laboratory Accreditation	
S3.	REPO	RTING AND RECORDING REQUIREMENTS	8
	A.	Reporting	
	B.	Records Retention	
	C.	Recording of Results	
	D.	Additional Monitoring by the Permittee	
	E.	Notice of Noncompliance Reporting	
	F.	Other Noncompliance Reporting.	
	G.	Maintaining a Copy of This Permit	
S4.	FACII	LITY LOADING1	1
	A.	Design Criteria	
	В.	Plans for Maintaining Adequate Capacity	
	C.	Duty to Mitigate	
	D.	Notification of New or Altered Sources	
	E.	Infiltration and Inflow Evaluation	
	F.	Waste Load Assessment	
S5.	OPER	ATION AND MAINTENANCE1	3
	A.	Certified Operator	
	B.	O & M Program	
	C.	Short-term Reduction	
	D.	Electrical Power Failure	
	E.	Prevent Connection of Inflow	
	F.	Bypass Procedures	
	G.	Operations and Maintenance Manual	
S6.	PRETREATMENT		7
	A.	General Requirements	
	B.	Wastewater Discharge Permit Required	
	C.	Identification and Reporting of Existing, New, and Proposed Industrial Users	
S7.	RESII	OUAL SOLIDS1	8
S8.	APPI	ICATION FOR PERMIT RENEWAL1	8
~ ~ .			9

S9.	EFFLUENT MIXING STUDY	18
	A. General Requirements	
	B. Reporting Requirements	
	C. Protocols	
S10.	OUTFALL EVALUATION	20
	GENERAL CONDITIONS	
G1.	SIGNATORY REQUIREMENTS	21
G2.	RIGHT OF INSPECTION AND ENTRY	22
G3.	PERMIT ACTIONS	22
G4.	REPORTING PLANNED CHANGES	24
G5.	PLAN REVIEW REQUIRED	
G6.	COMPLIANCE WITH OTHER LAWS AND STATUTES	
G7.	TRANSFER OF THIS PERMIT	24
G8.	REDUCED PRODUCTION FOR COMPLIANCE	25
G9.	REMOVED SUBSTANCES	25
G10.	DUTY TO PROVIDE INFORMATION	
G11.	OTHER REQUIREMENTS OF 40 CFR	25
G12.	ADDITIONAL MONITORING	25
G13.	PAYMENT OF FEES	
G14.	PENALTIES FOR VIOLATING PERMIT CONDITIONS	25
G15.	UPSET	26
G16.	PROPERTY RIGHTS	26
G17.	DUTY TO COMPLY	
G18.	TOXIC POLLUTANTS	26
G19.	PENALTIES FOR TAMPERING	26
G20.	REPORTING ANTICIPATED NON-COMPLIANCE	27
G21.	REPORTING OTHER INFORMATION	27
G22.	COMPLIANCE SCHEDULES	27
G23.	CONTRACT REVIEW	27

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A.	Discharge Monitoring Report	Monthly	August 15, 2008
S3.E.	Noncompliance Notification	As necessary	
S3.E.1.	Shellfish Protection	As necessary	
S4.B.	Plans for Maintaining Adequate Capacity	As necessary	
S4.D.	Notification of New or Altered Sources	As necessary	
S4.E.	Infiltration & Inflow Evaluation	1/permit cycle	June 15, 2010
S4.F.	Waste load Assessment	1/permit cycle	June 15, 2010
S5.G.	Operations and Maintenance Manual	1/permit cycle	September 15, 2008
S5.G.	Operations and Maintenance Manual Updates	As necessary	
S8.	Application for permit renewal	1/permit cycle	December 15, 2012
S9.A.	Effluent Mixing Plan of Study	30 days prior to study	December 15, 2008
S9.B.	Effluent Mixing Report	1/permit cycle	June 15, 2012
S9.A.	Receiving Water and Effluent Study Sampling and Quality Assurance Plan	1/permit cycle	December 15, 2008
S9.B.	Receiving Water and Effluent Study Results	1/permit cycle	June 15, 2012
S10.	Outfall Evaluation	1/permit cycle	June 15, 2010
G1.	Notice of Change in Authorization	as necessary	
G4.	Reporting Planned Changes	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G21	Reporting Anticipated Non-compliance	As necessary	
G22	Reporting Other Information	As necessary	
G23	Contract Submittal	As necessary	

SPECIAL CONDITIONS

In this permit the word must denotes an action that is mandatory and is equivalent to the word shall used in previous permits.

S1. DISCHARGE LIMITATIONS

A. Effluent Limitations

All discharges and activities authorized by this permit must comply with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit constitutes a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee may discharge municipal wastewater at the permitted location subject to compliance with the following limitations:

EFFLUENT LIMITATIONS ^a : OUTFALL # 001				
Parameter	Average Monthly	Average Weekly		
Biochemical Oxygen Demand (5-day)	30 mg/L, 3.8 lbs/day 85% removal of influent BOD	45 mg/L, 5.6 lbs/day		
Total Suspended Solids	30 mg/L, 3.8 lbs/day 85% removal of influent TSS	45 mg/L, 5.6 lbs/day		
Fecal Coliform Bacteria	47/100 mL	172/100 mL		
pH ^b	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0.			

^aThe average monthly and weekly effluent limitations equal the arithmetic mean of the samples taken. The average monthly and weekly limitations for fecal coliform are equal to the geometric mean of the samples taken.

B. Mixing Zone Descriptions

The following paragraph defines the maximum boundaries or flow-volume restriction of the mixing zones:

Chronic Mixing Zone:

Washington Administrative Code (WAC) 173-201A-400(7)(b)(i) specifies mixing zones must not extend in any horizontal direction from the discharge ports for a distance greater than 200 feet plus the depth of water over the discharge ports as measured during mean lower low water (MLLW). Given a MLLW water depth of 12 feet for the Permittee's outfall, the horizontal distance, therefore, is 212 feet. The mixing zone is a circle with radius of 212 feet measured from the center of each discharge port. The mixing zone extends from

^bIndicates the range of permitted values. The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.

the seabed to the top of the water surface. Chronic aquatic life criteria and human health criteria must be met at the edge of the chronic zone.

Acute Mixing Zone:

WAC 173-201A-400(8)(b) specifies that in estuarine waters a zone where acute criteria may be exceeded must not extend beyond 10 percent of the distance established for the maximum or chronic zone as measured independently from the discharge ports. The acute mixing zone is a circle with radius of 21.2 feet measured from the center of each discharge port. The mixing zone extends from the seabed to the top of the water surface. Acute aquatic life criteria must be met at the edge of the acute zone.

	Available Dilution (dilution factor)
Acute Aquatic Life Criteria	18
Chronic Aquatic Life Criteria	31
Human Health Criteria - Carcinogen	31
Human Health Criteria - Non-carcinogen	31

S2. MONITORING REQUIREMENTS

A. <u>Monitoring Schedule</u>

The Permittee must monitor in accordance with the following schedule:

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Influent	BOD ₅	mg/L lbs/day	Influent	1/week	24-hour Composite
Wastewater Influent	TSS	mg/L lbs/day	Influent	1/week	24-hour Composite
Wastewater Effluent	Flow	MGD	Final Effluent	Continuous ^a	Measurement
Wastewater Effluent	BOD ₅	mg/L lbs/day % Removal	Final Effluent	1/week	24-hour Composite
Wastewater Effluent	TSS	mg/L lbs/day % Removal	Final Effluent	1/week	24-hour Composite
Wastewater Effluent	рН	Standard Units	Final Effluent	5/week	Grab

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Effluent	Temperature	°C	Final Effluent	5/week	Grab
Wastewater Effluent	Fecal Coliform	Org./100 mL	Final Effluent	1/week	Grab
Wastewater Effluent	Total Ammonia	mg/L lbs/day	Final Effluent	1/week	24-hour Composite
Receiving Water and Effluent Study	As specified in section S9 (may include ambient temperature monitoring if not available in other reports)				
Efficient Study					

^aContinuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. The Permittee must sample 3 times a day (morning, noon, & evening) when continuous monitoring is not possible.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters. The Permittee must conduct representative sampling of any unusual discharge or discharge condition, including bypasses, upsets and maintenance-related conditions that may affect effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 Code of Federal Regulations (CFR) Part 136.

C. Flow Measurement

The Permittee must select and use appropriate flow measurement devices and methods consistent with accepted scientific practices. The Permittee must install, calibrate, and maintain the flow devices. This work is necessary to ensure that the accuracy of the measurements are consistent with the accepted industry standard and the manufacturers recommendation for that type of device. The Permittee must perform calibration at the frequency recommended by the manufacturer and at a minimum frequency of at least one calibration per year. The Permittee must maintain calibration records for at least three years.

Modification Date:	

D. <u>Laboratory Accreditation</u>

The Permittee must ensure that all monitoring data required by the Department of Ecology (Ecology) is prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH must be accredited if the laboratory must otherwise be registered or accredited. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

S3. REPORTING AND RECORDING REQUIREMENTS

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must submit monitoring results each month. The Permittee must summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. The Permittee must ensure that DMR forms are postmarked or received by Ecology no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. The Permittee must send report(s) to the Department of Ecology, P.O. Box 47775, Olympia, Washington 98504-7775.

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must include information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

The Permittee must submit DMR forms monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, the Permittee must submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. During the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology, the Permittee must extend this period of retention.

C. <u>Recording of Results</u>

For each measurement or sample taken, the Permittee must record the following information:

- The date, exact place, method, and time of sampling or measurement;
- The individual who performed the sampling or measurement;
- The dates the analyses were performed;
- The individual who performed the analyses;
- The analytical techniques or methods used; and
- The results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Condition S2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR.

E. <u>Notice of Noncompliance Reporting</u>

The Permittee must take the following action upon violation of any permit condition: Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem and, if applicable, immediately repeat sampling and analysis. The results of any repeat sampling must be submitted to Ecology within 30 days of sampling.

1. Immediate Noncompliance Notification

Any failure of the disinfection system must be reported <u>immediately</u> to Ecology's Regional Office 24-hour number at 360-407-6300.

Any failure of the disinfection system, any collection system overflows which may reach surface waters or any plant bypass discharging to a shellfish area must be reported <u>immediately</u> to Ecology and the Department of Health, Shellfish Program.

Ecology's Southwest Regional Office 24-hour number is 360-407-6300. The Department of Health's Shellfish number is 360-236-3330 (business hours) or 360-786-4183 (24 hours).

2. Twenty four hour Noncompliance Notification

The Permittee must report the following occurrences of noncompliance by telephone to Ecology at 360-407-6300, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1. above;
- b. Any unanticipated **bypass** that exceeds any effluent limitation in the permit (See Part S4.B., "Bypass Procedures");

- c. Any **upset** that exceeds any effluent limitation in the permit (See G.15, "Upset");
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A. of this permit; or
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

3. Report Within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause;
- b. The period of noncompliance, including exact dates and times;
- c. The estimated time noncompliance is expected to continue if it has not been corrected:
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
- e. If the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

4. Waiver of Written Reports

Ecology may waive the written report required in subpart 3 above on a case-by-case basis upon request if a timely oral report has been received.

5. Report Submittal

Reports must be submitted to the address in S3 ("REPORTING AND RECORDKEEPING REQUIREMENTS").

F. Other Noncompliance Reporting

The Permittee must report all instances of noncompliance, not required to be reported immediately or within 24 hours, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E.3 above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

The spill of oil or hazardous materials **must** be reported in accordance with the instructions obtained at the following website:

http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm

G. <u>Maintaining a Copy of This Permit</u>

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

S4. FACILITY LOADING

A. <u>Design Criteria</u>

The flows or waste loads for the permitted facility must not exceed the following design criteria:

Average flow for the maximum month: 0.034 MGD

BOD5 loading for maximum month: 62 lbs/day

TSS loading for maximum month: 62 lbs/day

B. Plans for Maintaining Adequate Capacity

The Permittee must submit a plan and a schedule for continuing to maintain capacity to Ecology when:

- 1. The actual flow or waste load reaches 85 percent of any one of the design criteria in S4.A for three consecutive months; or
- 2. The projected increase would reach design capacity within five years, whichever occurs first.

The plan and schedule for continuing to maintain capacity must be sufficient to achieve the effluent limitations and other conditions of this permit. This plan must identify any of the following actions or any other actions necessary to meet the objective of maintaining capacity.

- a. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
- b. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
- c. Limitation on future sewer extensions or connections or additional waste loads.

- Modification or expansion of facilities necessary to accommodate increased flow or wasteload.
- e. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.
- 4. Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by Ecology prior to any construction.
- 5. If the Permittee intends to apply for state or federal funding for the design or construction of a facility project, the plan must also meet the requirements of a "Facility Plan" as described in 40 CFR 35.2030. The plan must specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

C. <u>Duty to Mitigate</u>

The Permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment

D. Notification of New or Altered Sources

- 1. The Permittee must submit written notice to Ecology whenever any new discharge or a substantial change in volume or character of an existing discharge into the Publicly Owned Treatment Works (POTW) is proposed which:
 - a. Would interfere with the operation of, or exceed the design capacity of, any portion of the POTW;
 - b. Is not part of an approved general sewer plan or approved plans and specifications; or
 - c. Would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act.
- 2. This notice must include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or wasteload, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

E. Infiltration and Inflow Evaluation

1. The Permittee must conduct an infiltration and inflow evaluation. Refer to U.S. EPA publication, *I/I Analysis and Project Certification*, available as Publication No. 97-03 at: Publications Office, Department of Ecology, P.O. Box 47600, Olympia, Washington 98504-7600 or at http://www.ecy.wa.gov/programs/wq/permits/guidance.html. The Permittee may use plant monitoring records to assess measurable infiltration and inflow.

- 2. The Permittee must prepare a report which summarizes any measurable infiltration and inflow. If infiltration and inflow have increased by more than 15 percent from that found in the previous report based on equivalent rainfall, the report must contain a plan and a schedule for:
 - a. Locating the sources of infiltration and inflow; and
 - b. Correcting the problem.
- 3. For any filtration or inflow identified in segments of collection system which are under or adjacent to surface water, the Permittee must evaluate these segments for the existence of exfiltration.
- 4. The Permittee must submit a report summarizing the results of the evaluation. Any recommendations for corrective actions must be submitted by **June 15**, **2012**.

F. Waste Load Assessment

- 1. The Permittee must conduct an assessment of their flow and wasteload and submit a report to Ecology by **June 15, 2010**.
- 2. The report must contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and the percentage change in these parameters since the previous report.
- 3. The report must also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above.
- 4. Ecology may modify the interval for review and reporting if it determines that a different frequency is sufficient.

S5. OPERATION AND MAINTENANCE

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision of the permit requires the Permittee to operate back-up or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

A. <u>Certified Operator</u>

This permitted facility must be operated by an operator certified by the state of Washington for at least a Class II plant. This operator must be in responsible charge of

the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class I plant must be in charge during all regularly scheduled shifts.

B. O & M Program

- 1. The Permittee must institute an adequate operation and maintenance program for the entire sewage system.
- 2. The Permittee must keep maintenance records on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations. Such records must clearly specify the frequency and type of maintenance recommended by the manufacturer and must show the frequency and type of maintenance performed.
- 3. The Permittee must make maintenance records available for inspection at all times.

C. Short-term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee must:

- 1. Give written notification to Ecology, if possible, 30 days prior to such activities.
- 2. The notice must detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.
- 3. This notification does not relieve the Permittee of its obligations under this permit.

D. <u>Electrical Power Failure</u>

The Permittee must ensure that adequate safeguards prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at the treatment plant and/or sewage lift stations. Adequate safeguards include but are not limited to: alternate power sources, standby generator(s), or retention of inadequately treated wastes.

The Permittee must maintain Reliability Class II (EPA 430/9-74-001) at the wastewater treatment plant; Reliability Class II requires a backup power source sufficient to operate all vital components and critical lighting and ventilation during peak wastewater flow conditions. Vital components used to support the secondary processes (i.e., mechanical aerators or aeration basin air compressors) need not be operable to full levels of treatment, but must be sufficient to maintain the biota.

E. <u>Prevent Connection of Inflow</u>

The Permittee must strictly enforce its sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

F. <u>Bypass Procedures</u>

Bypass is the intentional diversion of waste streams from any portion of a treatment facility. This permit prohibits bypass. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass is for essential maintenance without the potential to cause violation of permit limits or conditions.

This permit authorizes a bypass if it allows for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least 10 days before the date of the bypass.

2. Bypass is unavoidable, unanticipated and results in noncompliance with the conditions of this permit.

This permit authorizes such a bypass only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. No feasible alternatives to the bypass exist, such as:
 - The use of auxiliary treatment facilities;
 - Retention of untreated wastes;
 - Stopping production;
 - Maintenance during normal periods of equipment downtime, but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass; or
 - Transport of untreated wastes to another treatment facility.
- c. The Permittee has properly notified Ecology of the bypass as required in condition S3.E of this permit.
- 3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
 - a. The Permittee must notify Ecology at least 30 days before the planned date of bypass. The notice must contain:

- i. A description of the bypass and its cause;
- ii. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing;
- iii. A cost-effectiveness analysis of alternatives including comparative resource damage assessment;
- iv. The minimum and maximum duration of bypass under each alternative;
- v. A recommendation as to the preferred alternative for conducting the bypass;
- vi. The projected date of bypass initiation;
- vii. A statement of compliance with State Environmental Policy Act (SEPA);
- viii. A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated; and
- ix. Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
 - i. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
 - ii. If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
 - iii. If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. The public will be given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve of a request to bypass by issuing an administrative order under Revised Code of Washington (RCW) 90.48.120.

G. Operations and Maintenance Manual

The Permittee must keep the approved Operations and Maintenance (O&M) Manual available at the treatment plant and all operators must follow the instructions and procedures of this manual.

The Permittee must prepare an O&M Manual according to WAC 173-240-080 and submit it to Ecology for approval by **September 15, 2008**. In addition to the requirements of WAC 173-240-080 (1) through (5) the O&M Manual must include:

- 1. Emergency procedures for plant shutdown and cleanup in the event of wastewater system upset or failure.
- 2. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
- 3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
- 4. The treatment plant process control monitoring schedule.
- 5. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit.
- 6. O&M for collection system.

Whenever the Permittee makes substantial changes or updates to the O&M Manual the Permittee must submit the changes to Ecology for review and approval.

S6. PRETREATMENT

A. General Requirements

The Permittee must work with Ecology to ensure that all commercial and industrial users of the POTW comply with the pretreatment regulations in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

B. <u>Wastewater Discharge Permit Required</u>

The Permittee must not allow any significant industrial users (SIUs) to discharge wastewater to the Permittee's sewer system until such user has received a wastewater discharge permit from Ecology in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC.

C. Identification and Reporting of Existing, New, and Proposed Industrial Users

- 1. The Permittee must take continuous, routine measures to identify all existing, new, and proposed SIUs and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewer system (see Appendix B of the Fact Sheet for definitions).
- 2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee must notify such user by registered mail that, if classified as an SIU, they must apply to Ecology and obtain a State Waste Discharge Permit. The Permittee must send a copy of this notification letter to Ecology within this same 30-day period.
- 3. The Permittee must also notify all PSIUs, as they are identified, that if their classification should change to an SIU, they must apply to Ecology for a State Waste Discharge Permit within 30 days of such change.

S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee must store and handle all residual solids in a manner that prevents their entry into state ground or surface waters. The Permittee must not discharge leachate from residual solids to state surface or ground waters.

S8. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by **December 15, 2012**.

S9. EFFLUENT MIXING STUDY

A. <u>General Requirements</u>

- 1. The Permittee must determine the degree of effluent and receiving water mixing which occurs within the mixing zone (as defined in permit condition S1.B). The degree of mixing must be determined during critical conditions, as defined in WAC 173-201A-020 Definitions-"Critical Condition," or as close to critical conditions as reasonably possible.
- 2. The Permittee must use the *Guidance for Conducting Mixing Zone Analyses* (Ecology, 1996) to establish the critical condition scenarios. The Permittee must measure the dilution ratio in the field with dye using study protocols specified in the *Guidance*, section 5.0 "Conducting a Dye Study," as well as other protocols listed in subpart C Protocols. The Permittee may use mixing models as an acceptable alternative or adjunct to a dye study if:

- a. The critical ambient conditions (may include ambient temperature monitoring if not available in other reports) necessary for model input are known or will be established with field studies; and
- b. If the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers.
- 3. The Permittee must consult the *Guidance* mentioned above when choosing the appropriate model.
- 4. Ecology requires the use of models if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study.
- 5. The Permittee may need to validate (and possibly calibrate) a model. The Permittee must conduct validation/calibration in accordance with the *Guidance* mentioned above in particular subsection 5.2 "Quantify Dilution." The Permittee must apply the resultant dilution ratios for acute and chronic boundaries in accordance with directions found in Ecology's *Permit Writer's Manual* (1994), Chapter VI and Appendix 6.

The Permittee must submit a Plan of Study to Ecology for review by **December 15, 2008**, prior to initiation of the effluent mixing study.

B. Reporting Requirements

- 1. The Permittee must include the results of the effluent mixing study in the Effluent Mixing Report, and must submit it to Ecology for approval no later than **June 15, 2012**.
- 2. If the Permittee has information on the background physical conditions or background concentration of chemical substances (for which there are criteria in Chapter 173-201A WAC) in the receiving water, the Permittee must submit this information to Ecology as part of the Effluent Mixing Report.
- 3. If the results of the mixing study, toxicity tests, and chemical analysis indicate that the concentration of any pollutant(s) exceeds or has a reasonable potential to exceed the State Water Quality Standards, Chapter 173-201A WAC, Ecology may issue an administrative order to require a reduction of pollutants or modify this permit to impose effluent limitations to meet the Water Quality Standards.
- 4. The Permittee must use some method of fixing and reporting the location of the outfall and mixing zone boundaries [i.e., Global Positioning System (GPS) coordinates]. The method of fixing station location and the actual station locations must be identified in the report.

C. Protocols

The Permittee must determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by Ecology:

- -Akar, P.J. and G.H. Jirka, Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges, USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.
- -Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges*, USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.
- -Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges*, USEPA, Environmental Research Laboratory, Athens, GA, EPA/600-3-90/012, 1990.
- -Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia WA 98504, July, 1994, including most current addenda.
- -Ecology, Guidance for Conducting Mixing Zone Analyses, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia WA 98504, October 1996.
- -Kilpatrick, F.A., and E.D. Cobb, <u>Measurement of Discharge Using Tracers</u>, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics*, USGS, U.S. Department of the Interior, Reston, VA 1985.
- -Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, <u>Fluorometric Procedures for Dye Tracing</u>, Chapter A12. *Techniques of Water-Resources Investigations of the USGS*, *Book 3*, *Application of Hydraulics*, USGS, U.S. Department of the Interior, Reston, VA 1986.

S10. OUTFALL EVALUATION

The Permittee must inspect once a permit cycle (1/permit), the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, the Permittee must include such verification in the report. By **June 15, 2010**, and once every permit cycle thereafter, the Permittee must submit the inspection report to Ecology.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

- A. All applications, reports, or information submitted to Ecology must be signed and certified.
 - 1. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - a. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation; or
 - b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - 2. In the case of a partnership, by a general partner.
 - 3. In the case of sole proprietorship, by the proprietor.
 - 4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1. The authorization is made in writing by a person described above and submitted to Ecology.
 - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 40 CFR 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - 1. Violation of any permit term or condition.

- 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
- 3. A material change in quantity or type of waste disposal.
- 4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
- 5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
- 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
- 7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
 - 1. A material change in the condition of the waters of the state.
 - 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 - 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 - 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 - 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
 - 6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 - 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
 - 1. When cause exists for termination for reasons listed in A1 through A7 of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
 - 2. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, but no later than 60 days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

- 1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
- 2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.

3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be re-suspended or reintroduced to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PAYMENT OF FEES

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof must be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit will incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation is a separate and distinct offense, and in

case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

G15. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement action the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit must, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment must be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

G20. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least 180 days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, must be scheduled during noncritical water quality periods and carried out in a manner approved by Ecology.

G21. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, such facts or information must be submitted promptly.

G22. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

G23. CONTRACT REVIEW

The Permittee must submit to Ecology any proposed contract for the operation of any wastewater treatment facility covered by this permit. The review is to insure consistency with chapters 90.46 and 90.48 RCW. In the event that Ecology does not comment within a 30-day period, the Permittee may assume consistency and proceed with the contract.